

**STATE OF WASHINGTON GEOLOGIST LICENSING BOARD  
LIST OF COMMON TOPICS FOR EDUCATIONAL EQUIVALENTS**

The Geologist Licensing Board has developed a list of common topics for each core class to assist applicants with understanding what is acceptable to the Board as “educational equivalents” (WAC 308-15-040). Educational equivalents are required when an applicant does not have a degree in geology, engineering geology, hydrogeology or one of the related geological sciences, or has not taken the core geology classes (structural geology, mineralogy/petrology and sedimentary geology/stratigraphy). An applicant’s education must have covered all of the topics listed for each core class that the applicant has not taken, in order to be granted educational credit for that core class. The equivalents must be documented by one or more of the following: certificates of completion; organization training records and outlines; and syllabi of the courses.

<b>Core Elements</b>	<b>Common Topics</b>
<i>Structural Geology</i>	(1) Fractures & Faulting (2) Folding (3) Metamorphic structures (foliation, fabrics, mylonites, etc) (4) Rock Mechanics (stress (force), strain mechanics of deformation, rheology, ductile behavior, flow, strain strain analysis, Mohr Circle. (5) Tectonic Regimes (plate tectonics, subduction, collision, transform faults, spreading centers, fold belts, shear zones. (6) Stereographic (Equal Area) Projection (7) Structural Analyses on Maps & Cross-Sections (structural contours, outcrop patterns, balanced cross-sections, orthographic projections, 3-point problems)
<i>Sedimentary Geology/Stratigraphy</i>	(1) Weathering and Erosion (2) Sediment Transport and Process (3) Sedimentary Rock Classification and Textures (4) Diagenesis (lithification) (5) Sedimentary Structures (6) Depositional Environments (7) Stratigraphy (8) Facies (9) Basin Analysis
<i>Mineralogy/Petrology</i>	(1) Rock-forming minerals (2) Crystal symmetry, systems, forms (3) Mineral groups & identification (4) Common rock type identification (5) Chemical Petrology-Major Elements (6) Metamorphism (7) Metamorphic Rock classification, facies & textures